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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/661,669

09/12/2003

Duane Treybig

7726-ONES

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49459

7590

01/16/2007

NALCO COMPANY

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EXAMINER

TOSCANO, ALICIA

ART UNIT

PAPER NUMBER

1712

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/661,669

Applicant(s)

TREYBIG ET AL.

Examiner

Alicia M. Toscano

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 2, 4-8, 12-17 and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Treybig (US 6569983).

This rejection is as set forth in the previous action dated 8/2/06.

Applicant amends Claim 1 to further specify the alkylating agent to overcome Treybig, however said alkylating agent is optional. Thus the rejection stands.

Rejection over Claims 29 and 31 are overcome due to amendment.

3. Claims 1, 3, 9, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by McCoy (US 4396499).

This rejection is as set forth in the previous action dated 8/2/06. Claim 9 was mistakenly forgotten by Examiner, however is rejected over the bisphenol A adduct included in Examiners previous statement of rejection.

Applicant argues McCoy does not incorporate an amine having 2 reactive hydrogen atoms. Examiner disagrees. The diamines of McCoy have 4 reactive hydrogen atoms, which inherently reads over the 2 active hydrogen atoms as Claimed.

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Further, Examiner notes McCoy does disclose monoamines having only 2 reactive functional groups in Example IV. Though not the preferred embodiment, this is taught to be functionally equivalent to diamines (See Table: Demulsifier Testing).

4. Claims 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Arora (US 5760108).

This rejection is as set forth in the previous action dated 8/2/06.

Applicant acknowledges 3 preparations of the curable epoxy resin, I, reaction of an epoxy resin with a polyhydric polyol and an amine-epoxy adduct, II, reaction of an epoxy resin and a polyoxyalkyleneamine and III, reaction of an epoxy resin, an amine-epoxy adduct and optionally a polyhydric phenol. While Examiner agrees with Applicant that I and III do not meet said Claims, Examiner finds reaction II to meet said Claims. Applicant did not comment about reaction II. Use of an amine with 2 active hydrogens is disclosed in Column 5 Line 52 and use of a diepoxide is disclosed in Column 11 Line 27.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 21, 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treybig in view of Gupta (US 2003/0008781).

This rejection is as set forth in the previous action dated 8/2/06. Claim 25 was mistakenly forgotten in the previous action by the Examiner, however it is rejected over the 2-3% range as included in Examiners previous statement of rejection

Applicant argues the Gupta does not make up for the deficiencies of Treybig, Examiner disagrees, see above. Applicant further argues the use of the polyhydroxyetheramine in a known process or in combination with known ingredients of Gupta is nonobvious. Examiner disagrees. Addition of the stabilization salts will increase or maintain the permeability of the clay in the subterranean formation.

7. Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treybig in view of Soula (US 4417048).

Treybig includes elements of the invention as discussed in the action dated 8/2/06. Treybig discloses the use of alkylating agents such as chlorooctane (Column 4 Line 6). Treybig does not include the use of methyl chloride or dimethyl sulfate, as required by the above Claims.

Soula discloses the N-alkylation of organonitrogen compounds. Agents for said alkylation include chlorooctane and methyl chloride. It would have been obvious to one of ordinary skill in the art at the time of the invention to include in Treybig, the use of methyl chloride, as taught by Soula, since this is recognized in the art as being functionally equivalent to chlorooctane.

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8. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treybig in view of Bruhnke (US 5773405).

This rejection is as set forth in the previous action dated 8/2/06.

Applicant argues Bruhnke does not make up for the deficiencies of Treybig, Examiner disagrees, see above. Applicant further argues (1) the polyhydroxyetheramine of Bruhnke is not comparable to applicants and (2) there is no incentive to choose ethylene glycol monobutyl ether from the laundry list of solvents. Examiner disagrees. The polyhydroxyetheramine of Treybig and Bruhnke are similar if not identical materials. Examiner requests experimental results to the contrary. Further it is the Examiner position that one would immediately envisage the use of said solvents from the small list of Bruhnke. If Applicants persist in said argument, Examiner requests experimental data showing unexpected results stemming from the addition of 0.005 to 2% of these well known solvents.

9. Claims 18 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treybig.

This rejection is as set forth in the previous action dated 8/2/06. Applicant argues Treybig does not teach the alkylating agents of instant application. Said agent is optional, as discussed above. Applicant offers no argument as to the obviousness rejection previously set forth.

Double Patenting

The double patenting rejection over Claims 29 and 31 are overcome. Reason: the N-alkylating agent of said Claims is not optional and thusly Treybig (6596983) no longer reads over said Claims.

Response to Arguments

10. Applicant's arguments, see pg 16, filed 8/2/06, with respect to the rejection(s) of claim(s) 30 under Treybig view Au have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Soula, see above.

11. A new rejection, due to Applicants amendment, over Claims 29 and 31 is set forth above.

Conclusion

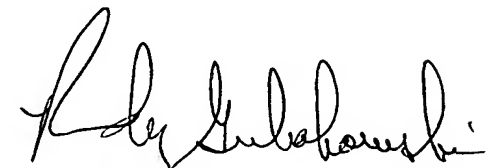
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Toscano whose telephone number is 571-272-2451. The examiner can normally be reached on Monday to Friday 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMT



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